

Mineral Industry Surveys

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SILICON IN MAY 2003

In May 2003, domestic production of silicon ferroalloys plus metal, excluding silvery pig iron, was estimated to have increased by about 6% compared with the corresponding figure for the previous month, according to the U.S. Geological Survey. Domestic shipments and producer stocks increased by 3% and 4%, respectively, compared with those of April 2003. All domestic data for ferrosilicon have been combined to avoid disclosing company proprietary data.

The April 2003 trade data included in this report indicated that silicon metal imports increased by 3% compared with those of March 2003. Ferrosilicon imports, on a gross weight basis, decreased by 15% compared with those in March, owing primarily to significant decreases in the trade categories "ferrosilicon, 55% - 80% silicon, other" and "magnesium ferrosilicon." On a gross weight basis, ferrosilicon exports were double those of March, with significant increases in both trade categories. Silicon metal exports decreased by 30% compared with those in March, owing to significant decreases in all trade categories, especially "silicon metal, more than 99.99% silicon."

Update

In March, the Mindanao Silicon Metal Corp. opened a new silicon smelter on the Philippine island of Mindanao. The company is currently (as of July 14) operating one furnace at a monthly production rate of 400 metric tons. The company plans to start a second furnace in September 2003 and a third by January 2004 (Ryan's Notes, 2003b).

In July, the European Court of the First Instance reaffirmed the European Commission's March 2001 decision to lift antidumping duties on ferrosilicon imports from China, Kazakhstan, Russia, Venezuela, and Ukraine (Ryan's Notes, 2003a).

According to a recent article in the Washington Post, the U.S. Food and Drug Administration (FDA) was reviewing at least one application for silicone gel breast implants, but has not yet decided when it will hold a public hearing on the matter. One company, Inamed Corp. of Santa Barbara, CA, applied for FDA approval late last year, and expects a ruling by yearend. Another Santa Barbara-based company that makes implants, Mentor Corp., said it also intends to seek FDA approval for silicone gel implants (Washington Post, The, 2003§¹).

References Cited

Ryan's Notes, 2003a, EC FeSi producers' setback: Ryan's Notes, v. 9, no. 29, July 21, p. 1.
Ryan's Notes, 2003b, Silicon prices retreat—New Philippine smelter: Ryan's Notes, v. 9, no. 28, July 14, p. 1-2.

Internet Reference Cited

Washington Post, The, 2003 (July 21), Silicone implants reconsidered, accessed July 21, 2003, at URL <http://www.washingtonpost.com>.

¹A reference that includes a section mark (§) is found in the Internet Reference Cited section.

Prices, cents per pound, silicon content

	<u>50% Ferrosilicon¹</u>	<u>75% Ferrosilicon²</u>	<u>Silicon Metal²</u>
May 7	42.0-47.0	47.0-48.0	60.0-62.0
May 14	42.0-47.0	47.0-48.0	60.0-62.0
May 21	42.0-47.0	47.0-48.0	60.0-62.0
May 28	42.0-47.0	47.0-48.0	60.0-62.0

¹Source: Ryan's Notes, North American transaction price.

²Source: Platts Metals Week, dealer import price.

TABLE 1
U.S. PRODUCTION, SHIPMENTS, AND PRODUCER STOCKS OF SILICON ALLOYS AND METAL IN 2003^{1, 2, 3}

(Metric tons)

Material	Gross production ⁴		Net shipments		Stocks, May 31
	May	Year to date ⁵	May	Year to date ⁵	
Ferrosilicon:					
All grades ^{6, 7}	18,900	89,400	12,900	72,500	31,100
Silicon metal:					
Excludes semiconductor grades	11,800	55,200	11,400	51,700	4,080

¹Data are rounded to no more than three significant digits.

²Includes U.S. Geological Survey estimates.

³Data for silvery pig iron (less than 25% silicon) withheld to avoid disclosing company proprietary data.

⁴Includes in-plant consumption, as in production of magnesium ferrosilicon and other miscellaneous alloys.

⁵Includes revisions to previous months' data.

⁶Ferrosilicon categories were aggregated to avoid disclosing company proprietary data.

⁷Includes miscellaneous silicon alloys.

TABLE 2
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN APRIL 2003^{1, 2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
More than 55% silicon:						
Canada	752	451	\$487,000	1,530	918	\$1,240,000
Malaysia	5	4	9,120	16	13	27,400
Mexico	244	146	244,000	440	272	510,000
Total	1,000	602	740,000	1,990	1,200	1,780,000
Other ferrosilicon:						
Brazil	40	18	51,600	80	36	102,000
Canada	266	133	232,000	1,090	543	890,000
Italy	--	--	--	16	9	26,300
Korea, Republic of	236	118	248,000	425	213	444,000
Mexico	242	121	235,000	625	312	581,000
Taiwan	1	1	6,190	1	1	6,190
Total	785	391	773,000	2,230	1,110	2,050,000
Total ferrosilicon	1,790	992	1,510,000	4,220	2,320	3,830,000
Metal:						
More than 99.99% silicon:						
China	78	XX	2,600,000	344	XX	10,100,000
Denmark	11	XX	640,000	22	XX	1,280,000
France	20	XX	479,000	50	XX	1,220,000
Germany	53	XX	1,860,000	240	XX	8,390,000
Japan	442	XX	17,900,000	1,530	XX	69,600,000
Korea, Republic of	52	XX	1,910,000	221	XX	7,820,000
Norway	15	XX	380,000	384	XX	9,480,000
Taiwan	11	XX	402,000	60	XX	2,160,000
Ukraine	13	XX	346,000	40	XX	1,100,000
United Kingdom	38	XX	2,650,000	78	XX	7,220,000
Other (30 countries)	37	XX	4,230,000	117	XX	10,600,000
Total	768	768 ^c	33,400,000	3,090	3,090 ^c	129,000,000

See footnotes at end of table.

TABLE 2--Continued
U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN APRIL 2003^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal--Continued:						
99.00% - 99.99% silicon:						
Belgium	--	--	--	4	4	\$5,180
Brazil	5	5	\$6,440	83	82	180,000
Denmark	--	--	--	7	7	9,270
Hong Kong	4	4	5,000	4	4	5,000
Jamaica	--	--	--	9	9	15,300
Japan	12	11	24,500	13	13	31,900
Mexico	2	2	2,540	49	49	73,300
Norway	--	--	--	146	145	206,000
Singapore	--	--	--	7	7	9,020
Venezuela	--	--	--	35	35	51,100
Other (3 countries)	--	--	--	5	5	20,400
Total	21	21	38,400	362	358	607,000
Other silicon:						
Canada	60	58	67,400	1,810	1,760	1,880,000
China	5	5	6,750	42	41	55,200
Germany	--	--	--	36	35	47,500
Hong Kong	6	6	64,900	27	26	110,000
Indonesia	--	--	--	8	8	12,700
Japan	255	248	443,000	540	524	879,000
Korea, Republic of	--	--	--	188	182	248,000
Mexico	16	15	81,200	38	37	176,000
Netherlands	9	9	110,000	187	178	1,210,000
United Kingdom	7	7	24,600	162	158	182,000
Other (10 countries)	6	5	15,600	30	29	132,000
Total	363	353	814,000	3,070	2,980	4,940,000
Total silicon metal	1,150	1,140	34,300,000	6,520	6,430	135,000,000

⁰Estimated. XX Not applicable. --Zero.

¹Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top 10 countries.

²Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN APRIL 2003^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Ferrosilicon:						
55% - 80% silicon, over 3% Ca:						
Argentina	316	133	\$228,000	462	229	\$420,000
Brazil	168	168	160,000	380	312	327,000
Canada	--	--	--	41	30	16,400
China	19	3	14,200	19	3	14,200
France	54	32	72,700	54	32	72,700
Mexico	3	1	11,100	11	8	40,700
Total	560	338	486,000	968	613	891,000
55% - 80% silicon, Other:						
Brazil	982	779	623,000	4,350	3,320	2,420,000
Canada	867	657	639,000	4,260	3,220	2,720,000
China	40	30	26,700	10,300	7,740	5,190,000
Egypt	--	--	--	1,150	814	583,000
Kazakhstan	4,260	3,280	2,950,000	8,510	6,550	5,460,000
Norway	424	317	562,000	1,710	1,260	2,190,000
Russia	411	309	235,000	2,210	1,590	1,160,000
South Africa	--	--	--	1,300	996	703,000
Ukraine	--	--	--	2,560	1,920	1,210,000
Venezuela	--	--	--	8,330	8,290 ³	8,410,000
Other (3 countries)	380	270	710,000	1,130	772	2,400,000
Total	7,370	5,650	5,740,000	45,800	36,500	32,400,000
80% - 90% silicon:						
Canada	--	--	--	19	15	7,420
South Africa	9	7	3,350	9	7	3,350
Total	9	7	3,350	28	23	10,800
Magnesium ferrosilicon:						
Argentina	200	89	135,000	807	364	560,000
Brazil	227	103	136,000	1,990	868	1,240,000
Canada	336	160	280,000	935	445	786,000
China	36	7	28,200	1,500	666	1,020,000
France	20	9	24,300	40	18	46,200
Germany	6	4	8,610	6	4	8,610
Japan	31	16	66,500	127	59	195,000
Norway	1,810	837	1,470,000	4,500	2,060	3,630,000
Total	2,670	1,220	2,150,000	9,900	4,490	7,480,000
Other ferrosilicon:						
Brazil	74	33	37,700	190	97	115,000
Canada	654	226	418,000	2,560	869	1,660,000
China	20	10	17,500	59	28	58,100
France	21	12	45,000	21	12	45,000
Russia	--	--	--	1,160	939	593,000
Total	770	280	518,000	3,990	1,950	2,470,000
Total ferrosilicon	11,400	7,500	8,900,000	60,700	43,500	43,300,000

See footnotes at end of table.

TABLE 3--Continued
U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN APRIL 2003^{1,2}

(Metric tons, unless otherwise specified)

Country	Gross weight	Contained weight	Value	Year to date		
				Gross weight	Contained weight	Value
Metal:						
More than 99.99% silicon:						
Canada	(4)	XX	\$5,730	2	XX	\$10,100
China	(4)	XX	16,600	35	XX	349,000
Denmark	1	XX	163,000	2	XX	443,000
Finland	--	XX	--	9	XX	29,100
Germany	31	XX	3,410,000	105	XX	12,500,000
Italy	39	XX	1,750,000	128	XX	5,300,000
Japan	38	XX	1,090,000	141	XX	3,900,000
Korea, Republic of	16	XX	133,000	53	XX	433,000
Taiwan	--	XX	--	(4)	XX	16,000
Spain	2	XX	11,200	4	XX	17,400
Other (4 countries)	16	XX	77,700	16	XX	79,900
Total	143	143 ^e	6,660,000	494	494 ^e	23,000,000
99.00% - 99.99% silicon:						
Argentina	--	--	--	120	119	115,000
Australia	362	360	393,000	2,470	2,200 ³	2,600,000
Austria	--	--	--	20	20	21,400,000
Brazil	3,900	3,870	4,680,000	17,700	17,600	6,030,000
Canada	1,380	1,370	1,650,000	5,060	5,010	237,000
China	140	139	128,000	265	263	422,000
Kazakhstan	120	119	111,000	420	416	96,000
Korea, Republic of	--	--	--	120	119	4,140,000
Norway	698	619 ³	1,150,000	2,370	2,220	19,200
South Africa	2,860	2,840	3,500,000	11,600	11,600	13,100,000
Other (4 countries)	17	17	15,800	52	27	111,000
Total	9,480	9,340	11,600,000	40,200	39,500	48,300,000
Other silicon:						
Australia	--	--	--	160	138	152,000
Brazil	--	--	--	585	576	593,000
Canada	--	--	--	883	860	660,000
China	564	556	504,000	2,200	2,170	1,940,000
Korea, Republic of	--	--	--	140	137	95,000
Norway	--	--	--	1,090	1,080	1,100,000
South Africa	554	545	535,000	3,920	3,860	3,750,000
Ukraine	68	67	63,300	374	368	350,000
United Arab Emirates	--	--	--	319	314	264,000
United Kingdom	200	197	205,000	461	448	467,000
Other (8 countries)	246	203	228,000	583	474	653,000
Total	1,630	1,570	1,530,000	10,700	10,400	10,000,000
Total silicon metal	11,300	11,000	19,800,000	51,400	50,400	81,400,000

^eEstimated. XX Not applicable. --Zero.

¹Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top 10 countries.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³All or part of these data have been referred to the U.S. Census Bureau for verification.

⁴Less than 1/2 unit.

Source: U.S. Census Bureau.